BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

THE NARRAGANSETT BAY COMMISSION	**))**	**DOCKET NO. 3483**

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

MARCH 2003

EXETER

ASSOCIATES, INC.

12510 Prosperity Drive

Suite 350

Silver Spring, Maryland 20904

TABLE OF CONTENTS

BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

THE NARRAGANSETT BAY COMMISSION	))	DOCKET NO. 3483

Direct Testimony of Thomas S. Catlin

Introduction

Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

A. My name is Thomas S. Catlin. I am a principal with Exeter Associates, Inc. Our offices are currently located at 12510 Prosperity Drive, Silver Spring, Maryland, 20904. Effective March 31, 2003, our offices will be moving to 5565 Sterrett Place, Suite 310, Columbia, Maryland 21044. Exeter is a firm of consulting economists specializing in issues pertaining to public utilities.

Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A. I hold a Master of Science Degree in Water Resources Engineering and Management from Arizona State University (1976). Major areas of study for this degree included pricing policy, economics, and management. I received my Bachelor of Science Degree in Physics and Math from the State University of New York at Stony Brook in 1974. I have also completed graduate courses in financial and management accounting.

Q. WOULD YOU PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE?

A. From August 1976 until June 1977, I was employed by Arthur Beard Engineers in Phoenix, Arizona, where, among other responsibilities, I conducted economic feasibility, financial and implementation analyses in conjunction with utility construction projects. I also served as project engineer for two utility valuation studies.

From June 1977 until September 1981, I was employed by Camp Dresser & McKee, Inc. Prior to transferring to the Management Consulting Division of CDM in April 1978, I was involved in both project administration and design. My project administration responsibilities included budget preparation and labor and cost monitoring and forecasting. As a member of CDM's Management Consulting Division, I performed cost of service, rate, and financial studies on approximately 15 municipal and private water, wastewater and storm drainage utilities. These projects included: determining total costs of service; developing capital asset and depreciation bases; preparing cost allocation studies; evaluating alternative rate structures and designing rates; preparing bill analyses; developing cost and revenue projections; and preparing rate filings and expert testimony.

In September 1981, I accepted a position as a utility rates analyst with Exeter Associates, Inc. I became a principal and vice-president of the firm in 1984. Since joining Exeter, I have continued to be involved in the analysis of the operations of public utilities, with particular emphasis on utility rate regulation. I have been extensively involved in the review and analysis of utility rate filings, as well as other types of proceedings before state and federal regulatory authorities. My work in utility rate filings has focused on revenue requirements issues, but has also addressed service cost and rate design matters. I have also been involved in analyzing affiliate relations, alternative regulatory mechanisms, and regulatory restructuring issues. This experience has involved electric, natural gas transmission and distribution, and telephone utilities, as well as water and wastewater companies.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY PROCEEDINGS ON UTILITY RATES?

A. Yes. I have previously presented testimony on more than 200 occasions before the Federal Energy Regulatory Commission and the public utility commissions of Arizona, California, Colorado, Delaware, the District of Columbia, Florida, Idaho, Illinois, Indiana, Kentucky, Louisiana, Maine, Maryland, Montana, Nevada, New Jersey, Ohio, Oklahoma, Pennsylvania, Utah, Virginia and West Virginia, as well as before this Commission. I have also filed rate case evidence by affidavit with the Connecticut Department of Public Utility Control.

Q. ARE YOU A MEMBER OF ANY PROFESSIONAL SOCIETIES?

A. Yes. I am a member of the American Water Works Association (AWWA) and the Chesapeake Section of the AWWA. I am currently Vice Chairman of the AWWA's Rates and Charges Committee and serve on the AWWA Water Utility Council's Technical Advisory Group on Economics.

Q. ON WHOSE BEHALF ARE YOU APPEARING?

A. I am presenting testimony on behalf of the Division of Public Utilities and Carriers (the Division).

Q. DO YOU HAVE PREVIOUS EXPERIENCE IN MATTERS INVOLVING THE NARRAGANSETT BAY COMMISSION?

A. Yes, I presented testimony on behalf of the Division in the Narragansett Bay Commission's (NBC's) last general rate case in Docket No. 3162, its abbreviated rate proceeding in Docket No. 3409, and in the Commission's examination of issues related to the implementation of a CSO abatement fee or stormwater fee by NBC in Docket No. 3432.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. Exeter Associates was retained by the Division to assist it in the evaluation of the General Rate Filing submitted by NBC on November 29, 2002. This testimony presents my findings and recommendations both with regard to the overall revenue increase to which NBC is entitled and with regard to the design of rates to recover those additional revenues. In making my determination of NBC's overall cost of service, I have incorporated the recommendation of Mr. David R. Stearns with regard to electricity costs.

Q. HAVE YOU PREPARED SCHEDULES TO ACCOMPANY YOUR TESTIMONY?

A. Yes. I have prepared Schedules TSC-1 through TSC-13. Schedule TSC-1 provides a summary of revenues and expenses under present and proposed rates. Schedules TSC-2 through TSC-11 present my adjustments to NBC's claimed revenues, operating expenses and debt service costs. Schedule TSC-12 and TSC-13 set forth my findings and recommendations with regard to rate design.

Q. PLEASE SUMMARIZE YOUR FINDINGS AND RECOMMENDATIONS.

A. As shown on Schedule TSC-1, I have determined the NBC's overall revenue requirement to be $51,777,958. This represents an increase over revenues at present rates of $7,326,745. The revenue increase which I have identified is $6,499,503 less than the revenue increase of $13,826,248 requested by NBC. This difference is the result of the adjustments to NBC's claimed revenues, expenses, and debt service costs which are summarized on Schedule TSC-2.

With regard to the development of rates to recover the NBC's overall cost of service, I am recommending that NBC's existing rates be increased on an across-the-board uniform percentage basis.

Q. WHAT TIME PERIODS HAVE YOU UTILIZED IN MAKING YOUR DETERMINATION OF NBC'S REVENUE REQUIREMENTS?

A. Consistent with NBC's filing, I have utilized a test year ended June 30, 2002 and a rate year ending June 30, 2004 as the basis for determining NBC's revenue requirements and the rate increase necessary to recover those requirements.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A. The remainder of my testimony is organized into sections corresponding to the issue or topic being addressed. These sections are set forth in the table of contents for this testimony.

Employee Levels

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO SALARIES AND WAGES RELATED TO EMPLOYEE LEVELS.

A. In its filing, NBC has based its claim for salaries and wages on an employee level of 250 full-time equivalent (FTE) employees, not including the additional employees to be added in conjunction with the STAR program. In response to the Division's first set of data requests, Question No. 11 (DIV 1-11), however, NBC has indicated that during 2002, the number of employees varied between 238 and 243 employees.[1] This is consistent with the fact that there are normally some employee vacancies due to employee turnover and other factors.

To recognize that actual employee levels are below the target level incorporated in NBC's filing, I am proposing to adjust salaries and wages to reflect an employment

[1] The employee counts identified in the response to DIV 1-11 include two FTE's out on long-term worker's compensation. These two FTE's are accounted for separately, and are an addition to 250 employees for which salaries and wages are claimed. Therefore, I have excluded the two FTE employees for purposes of my analysis and the comparisons cited in my testimony.

level of 243 FTE employees. This is consistent with the level of employees of 243 in October 2002, 242 in November 2002 and 243 in December 2002.

Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE DERIVATION OF YOUR ADJUSTMENT TO ACCOUNT FOR ACTUAL EMPLOYEE LEVELS?

A Yes, the calculation of my adjustment is presented on Schedule TSC-3. As indicated there, I have compared the actual employee level of 243 to the 250 employees incorporated in NBC's filing to derive a vacancy level of 7 employees. I have than multiplied this by the average rate year salary per employee of $44,732. This produces an adjustment to reduce salaries and wages by $313,126.

<u>Payroll Related Expenses</u>

Q. WHAT ADJUSTMENT HAVE YOU MADE TO PAYROLL RELATED EXPENSES?

A. I have adjusted payroll related expenses to reflect my adjustment to salaries and wages to recognize actual employee levels. The items which I have included in developing this adjustment include Social Security taxes (FICA), pension contributions, health & disability insurance and health, dental and vision premiums.

The derivation of my adjustment is presented on Schedule TSC-4. As shown there, I have separately considered those benefits whose cost is proportional to the level of salaries and wages (FICA, pension and health & disability) and those which are a function of the number of employees (health, dental and vision premiums). In the case of salary based benefits, I have calculated a composite rate by dividing the rate year expense projected by NBC by NBC's estimate of rate year salaries. I have then multiplied this composite rate by my adjustment to salaries and wages to determine the corresponding reduction in benefits expense. In the case of employee count based benefits, I have calculated the average premium per employee included in NBC's filing and multiplied by an adjustment to the number of employees. As shown on Schedule TSC-4, this adjustment results in a total reduction in payroll related costs of $120,026.

Worker's Compensation-Old Claims

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO THE EXPENSE FOR WORKER'S COMPENSATION-OLD CLAIMS.

A. Currently, NBC insures itself for worker's compensation claims using an outside insurer. Historically, however, NBC was self-insured for such claims. Although the costs related to the period when NBC was self insured have steadily declined since the change was made several years ago, NBC continues to make payments to recipients on long-term cases. As part of its filing, NBC included $152,662 for these "old" worker's compensation claims based on the level of such claims in the test year.

In response to DIV 1-18, PWSB has indicated that two of the old claims have recently been resolved. As a result, the ongoing level of Worker's Compensation-Old Claims expense has been reduced to $50,000 per year. Accordingly, I have made an adjustment to reduce rate year expense by $102,662 to recognize this reduction in the ongoing costs. The calculation of this adjustment is presented on Schedule TSC-5.

Grant Funded Personnel Costs

Q. PLEASE EXPLAIN YOUR ADJUSTMENT TO GRANT FUNDED PERSONNEL COSTS.

A. According to the response to DIV 1-9, NBC received a grant which will be used to find $20,000 of rate year salaries and benefits. As indicated in that response, this grant funding was not recognized in determining the rate year personnel costs included in NBC's filing. Although this amount is small, it is appropriately recognized as an offset to rate year expenses and I have done so. This adjustment is shown on Schedule TSC-6.

<u>Sludge Disposal Costs</u>

Q. WHAT ADJUSTMENT ARE YOUR PROPOSING TO SLUDGE DISPOSAL COSTS?

A. In its filing, NBC adjusted sludge disposal costs to recognize the increase in the disposal and handling rates applicable under its various contracts with outside vendors. For the Bucklin Point Facility, the quantities of sludge in the rate year were based on a three-year historical average of the quantities disposed of an fiscal years 2000 through 2002. For Field's Point, the rate year quantities were assumed to be equal to those in the test year (FY 2002).

In order to reflect a normalized level of expense, I am proposing to adjust the quantities of sludge disposed of at the Field's Point facility to reflect a three-year average, comparable to that used for Bucklin Point. As shown on Schedule TSC-7, the effect of this adjustment is to reduce rate year expenses by $13,686.

I would like to note that the quantities of sludge which I used for FY 2000 were not readily available from NBC's records. Accordingly, I relied on the information which I received in Docket No. 3162. Since liquid sludge disposal quantities were not included in that information, I utilized a two-year average for the quantity of liquid sludge.

Bad Debt Expense

Q. WHAT ALLOWANCE FOR BAD DEBT EXPENSE HAS BEEN INCLUDED IN NBC'S CLAIMED RATE YEAR COST OF SERVICE?

A. NBC's claimed rate year cost of service includes an allowance for bad debt of $206,109. This amount is equal to the audited bad debt expense during the test year?[2]

Q. WHAT CONCERN DO YOU HAVE WITH THIS CLAIM?

A. As shown on Schedule TSC-8, both the level of accounts written off and audited bad debt expense during the fiscal year 2002 test year are well in excess of the levels in prior years. In addition, the response to DIV 1-24 indicates that the level of bad debt in the test year was largely attributable to the write-offs associated with two customers. Accordingly, the level of bad debt expense in the test year is not representative of normalized, ongoing levels.

Q. WHAT IS YOUR RECOMMENDATION AS TO THE ALLOWANCE FOR BAD DEBT TO BE RECOGNIZED FOR THE RATE YEAR?

A. I am proposing to adjust bad debt expense to reflect a normalized level of expense. Based on bad debt write-offs subsequent to the test year, it appears that the ongoing level of based debt will be above the historical average given current economic conditions. In response to an informal follow-up question with regard to DIV 1-24, NBC has estimated its ongoing level of bad debts is expected to be at least $120,000 per year. Consistent with this estimate, I am recommending that the rate year level of bad debt expense be set at $120,000. As shown on Schedule TSC-8, this adjustment reduces rate year expenses by $86,109.

[2] Audited bad debt expense is based on bad debt write-offs plus or minus an "allowance adjustment" which sets the reserve for uncollectibles equal to 8 percent of the outstanding accounts receivable balance.

Management/Audit Services

Q. WHAT ADJUSTMENT HAVE YOU MADE TO NBC'S CLAIM FOR MANAGEMENT/AUDIT SERVICES EXPENSE?

A. My adjustment to Management/Audit (M/A) Services expense consists of reductions to three components of the costs incorporated by NBC in its rate year expense claim. First, in developing its rate year claim, NBC has adjusted the test year level of M/A Services expenses to include $20,000 for its share of a job assessment study required under its union contract. Rather than including the full cost of this study as an annual expense, I am proposing to normalize the cost over three years. This time period is consistent with both the term of the union contract and the period over which NBC has proposed to amortize rate case expenses. This component of my adjustment reduces rate year expenses by $13,333.

Second, I have made an adjustment to NBC's projection of the fee paid to U.S. Filter for operating the Bucklin Point facility. The fee for the FY 2004 rate year will be calculated based on the Consumer Price Index (CPI-U) as of April 1, 2003 compared to the base CPI-U on April 1, 1999. I have updated the projected CPI-U to reflect the actual value as of January 31, 2003 adjusted to reflect 2 months additional growth. As shown on page 2 of Schedule TSC-9, this adjustment reduces the projected U.S. Filter fee for FY 2004 by $17,665. To the extent the actual CPU-U as of April 1, 2003 becomes known before the close of the record, it would be appropriate to further update this cost.

Third, I have adjusted M/A Services expense to exclude the cost of further stormwater rate studies. NBC included $290,000 in the rate year based on the recovery over two years of the estimated cost of conducting the further studies identified by Parsons Engineering to implement a stormwater rate. It is my understanding that at the end of the recent hearings in Docket No. 3432, the Commission had decided not to further pursue a separate stormwater rate at the present time.

Q. HAVE YOU PREPARED A SCHEDULE WHICH SUMMARIZES YOUR ADJUSTMENT TO MANAGEMENT/AUDIT SERVICES EXPENSE FOR THE RATE YEAR?

A. Yes. Page 1 of Schedule TSC-9 summarizes my adjustment to the allowance for M/A services expense for the rate year. As indicated there, the three changes which I have made to NBC's claim reduce rate year expense by $320,998.

Debt Service

Q. WOULD YOU PLEASE SUMMARIZE THE CIRCUMSTANCES WHICH CAUSE THE DETERMINATION OF DEBT SERVICE RELATED COSTS TO BE MORE COMPLICATED IN THIS CASE THAN IN RECENT NBC CASES?

A. Yes. In recent years, NBC has relied predominately on loans from the Rhode Island Clean Water Finance Agency (RICWFA) to fund its construction program. Because the interest rates on loans from the RICWFA are subsidized and below market interest rates, they serve as an extremely attractive source of capital. Unfortunately, sufficient funds are not expected to be available over the next several years to fully finance NBC's capital improvements program. As a result, alternative sources of funds must be considered.

Q. WHAT OPTIONS HAS NBC IDENTIFIED TO FUND ITS CAPITAL IMPROVEMENTS PROGRAM?

A. NBC has identified two alternative sources of financing for that portion of its capital improvements program which is in excess of the funds available from RICWFA. One option is to issue open market bonds. This would be similar to the use of loans from the

RICWFA in that they would be a long-term source of financing with fixed interest rates. However, the interest rates on open market bonds would not be subsidized and would be at higher market rates.

The second alternative source of financing identified by NBC is the use of tax-exempt commercial paper (TECP). As the name implies, TECP is a source of tax-exempt short-term debt which could be used as a substitute for RICWFA loans until additional loan funds become available. As explained by NBC witness Maureen Gurghigian, the use of the TECP program is expected to result in cost savings compared to the use of open market bonds.

Q. WHICH ALTERNATIVE HAS BEEN RECOGNIZED BY NBC IN DETERMINING ITS RATE YEAR COST OF SERVICE?

A. NBC has based its filed cost of service on a two-year average level of debt service assuming open market bonds are used to finance that portion of its capital program for which RICWFA loan funds are not available.

Q. WHY HAS NBC REFLECTED THE USE OF OPEN MARKET BOND FINANCING IF THE TECP PROGRAM IS EXPECTED TO BE LESS COSTLY?

A. As explained on page 6 of NBC witness Walter Edge's testimony, NBC filed its case including the higher costs of the open market bond financing because the TECP approach is new and NBC was not certain whether it would be acceptable. If NBC filed using costs under the TECP financing method and the Commission preferred open market bond financing, NBC was concerned it would not have sought adequate rate relief and would be forced to refile. As noted at page 28 of Mr. Edge's testimony, NBC is requesting that the Commission approve the use of the TECP financing and base rates on the two-year average of debt service for FY 2004 and FY 2005.

Q. HAS NBC IDENTIFIED ANY OTHER ISSUES WHICH MERIT CONSIDERATION IN THE DECISION AS TO WHETHER TO UTILIZE TECP OR OPEN MARKET BOND FINANCING?

A. Yes. In order to utilize TECP financing, the Commission would have to allow rates to be adjusted automatically in subsequent years in which TECP debt continues to be utilized. This is necessary to ensure that rates will be adequate to meet the debt service and coverage requirements associated with the RICWFA bonds to be issued to refinance or "take-out" the TECP debt.

Q. WHAT IS YOUR RECOMMENDATION?

A. I am recommending that the Commission approve NBC's proposal to utilize TECP financing to fund that portion of its capital improvement program for which RICWFA loans are not available. This will reduce costs compared to the open market bond financing and will maintain flexibility. To the extent RICWFA funds do not become available or other events make switching to open market bonds desirable in the future, NBC will have the flexibility to do so if TECP financing is authorized now. In contrast, if open market bonds are issued, NBC will have little or no flexibility to replace those bonds with RICWFA loans or other forms of financing in the future.

While I have concerns about mechanisms which provide for automatic rate adjustments, I believe that the benefits to ratepayers associated with the use of TECP financing in lieu of open market bonds warrant it in this case. However, I believe that certain understandings and conditions should be established by the Commission in any order approving TECP financing.

Q. WHAT CONDITIONS SHOULD BE ESTABLISHED BY THE COMMISSION'S ORDER?

A. The Commission should require that at the time of each scheduled TECP related rate adjustment, NBC should file a compliance filing that will serve to true-up any variances between actual borrowings and prior projections. At the time of the filing, the amount of the projected rate increases will be adjusted only for changes in the amount of principal, the timing of borrowings and interests rates. No other changes in revenues or expenses would be included as part of any scheduled TECP rate increase. Finally, the automatic revenue increases necessary in conjunction with the TECP program should be recovered through a uniform percentage increase in all rates. I would note that these conditions are consistent with NBC's expectations as indicated in the responses to DIV 2-8, 2-9 and 2-10.

Q. DO YOU HAVE ANY OTHER RECOMMENDATIONS AS TO REQUIREMENTS WHICH SHOULD BE ESTABLISHED IN THIS PROCEEDING?

A. Yes. Because the scheduled increases contemplated under the TECP program cover only debt costs, it is likely that NBC will be required to seek rate relief to cover other operating expenses within three or so years. However, to ensure that the Commission and other parties have the opportunity to review changes in the CSO program, review changes in revenues and costs, evaluate the TECP program and consider the availability of RICWFA loans, I would recommend that Commission require NBC to file a rate filing no later than by the beginning of FY 2007.

Q. DO YOU AGREE WITH NBC'S ESTIMATE OF THE ANNUAL DEBT SERVICE COSTS UNDER THE TECP PROGRAM?

A. No. In its determination of the debt service associated with TECP debt, NBC assumed that the Commercial Paper is drawn down in full on the first day of each year. I am proposing to adjust the annual interest costs associated with TECP debt to recognize that the funds borrowed will be drawn down over the course of the year. To do this, I am proposing to calculate the interest on the TECP debt based on the assumption that the additional Commercial Paper issued each year will only be outstanding for, on average, one-half the year (the mid-year convention).

Q. HAVE YOU PREPARED A SCHEDULE WHICH SHOWS THE EFFECT OF YOUR RECOMMENDATIONS ON THE DEBT SERVICE AND COVERAGE REQUIREMENT INCORPORATED IN NBC'S CLAIM?

A. Yes. Schedule TSC-10 shows my calculation of debt service and coverage requirements based on the average debt service in FY 2004 and FY 2005. This schedule is based on the use of TECP financing and reflects the mid-year convention for purposes of calculating interest on incremental TECP debt. As indicted there, use of this method reduces debt service costs by $3,614,896 compared to the debt incorporated in NBC's filing based on the use of open market bond financing. The associated reduction in coverage requirements is $1,206,748. I would note that when a two-year average of debt service is used, meeting coverage requirements is both years requires that the coverage allowance included in the cost of service be equal to 25 percent of the higher amount of debt service in the two years.

Q. HAVE YOU PREPARED A SCHEDULE SHOWING THE PROJECTED ANNUAL REVENUE CHANGES WHICH WOULD BE SCHEDULED UNDER THE TECP PROGRAM WITH YOUR ADJUSTMENTS TO INTEREST COSTS TO REFLECT THE MID-YEAR CONVENTION?

A. Yes. Schedule TSC-11 shows the scheduled rate changes under the TECP program with interest adjusted to reflect the mid-year convention. In preparing this schedule, I have shown the debt service and coverage requirements and the single year rate increases which would be required in FY 2004 and FY 2005 as a basis for comparison to the increase which I have recommended based on the average debt service for FY 2004 and FY 2005. I have also, reflected the Division's adjustments to operating expenses so that the increases shown are consistent with my recommendation in this proceeding. Finally the rate increase scheduled for FY 2006 assumes the two-year average approach for FY 2004 and FY 2005 is adopted in this proceeding. If separate rate increases in FY 2004 and FY 2005 were approved, the ongoing level of revenues at the end of FY 2005 would be higher and the increase in FY 2006 would be smaller.

Electricity Expense

Q. WHAT ADJUSTMENT HAVE YOU INCLUDED FOR ELECTRICITY EXPENSE IN YOUR DETERMINATION OF NBC'S RATE YEAR COST OF SERVICE?

A. David R. Stearns has undertaken the analysis of electricity costs on behalf of the Division. As explained in Mr. Stearn's testimony, he has calculated NBC's rate year electric power costs to be $2,063,341. As shown on his Exhibit DS-1, this represents a reduction of $221,289 compared to NBC's claimed rate year electricity expense. I have incorporated this adjustment in my calculation of NBC's rate year cost of service on behalf of the Division.

Operating Reserve

Q. PLEASE SUMMARIZE THE OPERATING RESERVE ALLOWANCE WHICH HAS BEEN REFLECTED IN NBC'S COST OF SERVICE.

A. Historically, the Commission has permitted NBC to include an operating reserve equal to 1.5 percent of total operating expenses as part of its overall revenue requirement. The purpose of this reserve has been to provide a cushion against unforeseen expenses or lost revenue. The operating expenses used as the base for calculating the reserve allowance have historically included debt service and cash capital outlays as well as operation and maintenance (O&M) expenses.

Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO MAKE TO THE CALCULATION OF NBC'S OPERATING RESERVE ALLOWANCE?

A. I am proposing to base the calculation of the operating reserve allowance on total operating expense excluding debt service and the associated debt service coverage requirement. That is, I am proposing to set the operating reserve allowance equal to 1.5 percent of O&M and amortization expense. (Because capital outlays are being paid for using the prior year's debt service coverage allowance, cash capital outlays are not anticipated to be funded out of revenue and, hence, have not been included in the calculation of the operating reserve.)

Q. WHAT IS YOUR REASONING FOR MAKING THIS CHANGE TO THE CALCULATION?

A. I am proposing to exclude debt service related costs from the calculation because debt service already has its own reserve requirement. Based on the Division's recommended debt service expense, $6.1 million has been included for debt coverage. The purpose of this coverage requirement is to provide debt holders with the assurance that there will be sufficient funds to make debt principal and interest payments in the event of revenue shortfalls or other unexpected events. Therefore, there is not also a need to provide an additional 1.5 percent operating reserve allowance on debt service and debt coverage requirements in addition to the 25 percent debt coverage requirement.

I would note that while an operating reserve allowance has been included on debt service and coverage costs previously for NBC, two important changes have occurred. First, this is the first general rate filing in which the debt service coverage is being set at 25 percent of the total amount of all debt service costs. Second, the amount of debt service included in NBC's cost of service has increased dramatically in recent years and is projected to continue to do so. In NBC's last general rate case in Docket No. 3162, debt service and coverage requirement for the rate year ended December 31, 2001 were $11.6 million. In NBC's abbreviated rate filing in Docket No. 3409, debt service and coverage for the rate year ended June 30, 2003 were $17.4 million. In this case, these costs are $28.0 million under the Division's recommendation and are projected to increase to $37.7 million in FY 2006. (See Schedule TSC-11.)

Q. WHAT IS THE EFFECT OF YOUR RECOMMENDATION ON THE RATE YEAR COST OF SERVICE?

A. Excluding the Division's recommended debt service and coverage requirements (including the 2003 carryover offset) from the calculation of the operating reserve allowance reduces that reserve requirement by $389,671.

Q. HAVE YOU MADE ANY OTHER ADJUSTMENTS TO THE OPERATING RESERVE ALLOWANCE CLAIMED BY NBC FOR THE RATE YEAR?

A. Yes, I have also adjusted the operating reserve allowance to reflect the Division's adjustments to NBC's claimed operating expenses. Overall, my recommended operating reserve allowance is $479,964 less than NBC's filed claim.

Rate Design

Q. HOW ARE YOU PROPOSING TO DESIGN RATES TO RECOVER THE REVENUE INCREASE WHICH YOU HAVE IDENTIFIED ON BEHALF OF THE DIVISION?

A. I am proposing that the rates necessary to generate the revenue increase which I have identified be developed by increasing the rates for all services on a uniform percentage basis. This uniform percentage increase would be applied to both flat fees and measured usage fees for residential, commercial and industrial customers as well as to septage fees, BOD/TSS surcharges and connection and discharge permit fees. This is the same procedure which NBC has proposed to recover its proposed increase.

Q. HAVE YOU PREPARED SCHEDULES SHOWING THE CALCULATION OF YOUR PROPOSED RATES?

A. Yes. Schedule TSC-12 shows the derivation of the uniform percentage increase in existing rates necessary to generate the required rate increase. As shown on that schedule, the overall percentage increase in rates is 16.76 percent.

Schedule TSC-13 shows the calculation of the proposed rates based on the application of the 16.76 percent increase to the current rates. Schedule TSC-15 also provides a proof of revenue at proposed rates.

Q. DOES THAT CONCLUDE YOUR TESTIMONY?
A. Yes, it does.

BEFORE THE

PUBLIC UTILITIES COMMISSION

OF RHODE ISLAND

THE NARRAGANSETT BAY COMMISSION	**)** **)**	**DOCKET NO. 3483**

SCHEDULES ACCOMPANYING THE

DIRECT TESTIMONY

OF

THOMAS S. CATLIN

ON BEHALF OF THE

DIVISION OF PUBLIC UTILITIES AND CARRIERS

MARCH 2003

EXETER

ASSOCIATES, INC.
12510 Prosperity Drive
Suite 350
Silver Spring, Maryland 20904

EXETER
ASSOCIATES, INC.
12510 Prosperity Drive
Suite 350
Silver Spring, Maryland 20904

Docket No. 3483
Schedule TSC-1

THE NARRAGANSETT BAY COMMISSION

Summary of Revenues and Expenses at
Present and Proposed Rates
Rate Year Ended June 30, 2004

	Rate Year Amount Per NBC	Division Adjustments	Rate Year at Present Rates	Allowable Rate Increase	Rate Year at Proposed Rates
Revenue					
User Fee Revenue	$ 41,672,033	$ -	$ 41,672,033	$ 6,985,012	$ 48,657,045
Other Service Revenue	2,038,980	-	2,038,980	341,733	2,380,713
Miscellaneous	740,200	-	740,200		740,200
Total Revenue	$ 44,451,213	$ -	$ 44,451,213	$ 7,326,745	$ 51,777,958
Expenses					
Personnel Services	14,886,459	(555,815)	14,330,644	-	14,330,644
Operating Supplies & Expenses	9,148,525	(321,084)	8,827,441	-	8,827,441
Special Services	2,571,851	(320,998)	2,250,853	-	2,250,853
Capital Outlays	-	-	-	-	-
Amortization	9,690		9,690	-	9,690
Debt Service	25,524,784	(3,614,896)	21,909,888	-	21,909,888
Carry Forward from 2003	(2,025,910)	-	(2,025,910)	-	(2,025,910)
Debt Coverage	7,300,819	(1,206,748)	6,094,072	-	6,094,072
Total Expenses	$ 57,416,218	$ (6,019,539)	$ 51,396,679	$ -	$ 51,396,679
Operating Reserve	861,243	(479,964)	381,279	-	381,279
Total Cost of Service	$ 58,277,461	$ (6,499,503)	$ 51,777,958	$ -	$ 51,777,958
Revenue Surplus/(Deficiency)	$ (13,826,248)	$ 6,499,503	$ (7,326,745)	$ 7,326,745	$ -

Docket No. 3483
Schedule TSC-2

THE NARRAGANSETT BAY COMMISSION

Summary of Division Adjustments to
Rate Year Revenues and Expenses at Present Rates
Rate Year Ending June 30, 2004

Description	Amount	Source
Salaries & Wages-Actual Employees	(313,126)	Schedule TSC-3
Payroll Related Expenses and Taxes	(120,026)	Schedule TSC-4
Worker's Comp-Old Claims	(102,662)	Schedule TSC-5
Granted Funded Personnel Costs	(20,000)	Schedule TSC-6
Field's Point Sludge Disposal Costs	(13,686)	Schedule TSC-7
Bad Debt Expense	(86,109)	Schedule TSC-8
Management/Audit Services Expense	(320,998)	Schedule TSC-9
Debt Service Expense	(3,614,896)	Schedule TSC-10
Coverage Expense	(1,206,748)	Schedule TSC-10
Electric Power Expense	(221,289)	Exhibit DS-1
Operating Reserve	(479,964)	Refer to Testimony
Total Expense Adjustments	$ (6,499,503)	

Docket No. 3483
Schedule TSC-3

THE NARRAGANSETT BAY COMMISSION

Adjustment to Salaries &Wages
to Reecognize Actual Employee Levels
Rate Year Ending June 30, 2004

Actual Employee Count (1)	243
Employees Included in Rate Year Company Claim (2)	250
Vacant Positions	7
Average Salary per Employee (3)	$ 44,732
Adjustment to Salaries and Wages	$ (313,126)

Notes:

(1) Per response to DIV 1-11. Reflects full time equivalents (FTE) as of October-December 2002. Excludes 2 FTE on long-term Worker's Compensation to be consistent with targeted employee level.

(2) Per response to DIV 1-8. Excludes employees for STAR Program.

(3) Based on rate year salaries if $11,183,080 per Schedule WEE-7 divided by 250 FTE employees.

Docket No. 3483
Schedule TSC-4

THE NARRAGANSETT BAY COMMISSION

Adjustment to Payroll Related Expenses
to Reflect Adjustment to Salaries and Wages
Rate Year Ending June 30, 2004

Salary Based Benefits (1)		
FICA-Composite Rate	7.49%	
Pension Contribution-Composite Rate	9.83%	
Health & Disability-Composite Rate	0.75%	
Combined Benefits Percentage	18.07%	
Division Adjustment to Salaries and Wages	$ (313,126)	
Adjustment to Rate Year Expense		$ (56,582)
Employee Count Based Benefits (2)		
Health, Dental and Vision Cost per Employee	$ 9,064	
Division Adjustment to Number of Employees	(7)	
Adjustment to Rate Year Expense		$ (63,445)
Total Adjustment to Rate Year Wage Related Expense		$ (120,026)

Notes:

(1) Based on the rate year ratios of applicable total expense for union and non-union employees to total rate year salaries and wages per Schedule WEE-7.

(2) Based on the rate year Health, Dental and Vision premiums per Schedule WEE-8 divided by 250 employees.

Docket No. 3483
Schedule TSC-5

THE NARRAGANSETT BAY COMMISSION

Adjustment to Annualize Worker's Compensation-Old Claims
Rate Year Ending June 30, 2004

Annualized Worker's Comp-Old Claims (1)	$ 50,000
Amount per NBC Filing (2)	152,662
Adjustment to Rate Year Expense	$ (102,662)

Notes:
(1) Per informal follow-up response to Division 1-18.

(2) Per Schedule WEE-4.

Docket No. 3483
Schedule TSC-6

THE NARRAGANSETT BAY COMMISSION

Adjustment to Recognize Grant Funded Personnel Costs
Rate Year Ending June 30, 2004

Rate Year Grant Funding of Wages & Benefits (1)	$	20,000
Amount per NBC Filing (1)		-
Adjustment to Rate Year Expense	$	(20,000)

Notes:
(1) Per response to DIV 1-9.

Docket No. 3483
Schedule TSC-7

THE NARRAGANSETT BAY COMMISSION

Adjustment to Sludge Handling Expense
at Field's Point Treatment Facility
Rate Year Ending June 30, 2004

	Usage (1) (Wet Tons)	Rate (2) (per WT)	Expense
Ash Disposal	1,929	$ 16.00	$ 30,864
Sludge Disposal	2,619	$ 53.00	138,825
Hauling Fee	2,608	$ 18.60	48,509
Liquid Sludge	6.85	$ 475.00	3,254
Total Disposal Costs			$ 221,451
Amount per NBC Filing (2)			235,137
Adjustment to Rate Year Expense			$ (13,686)

Notes:

(1) Reflects average of wet tons for FY 2000 through FY 2002 per the responses to DIV 1-22 in current proceeding and Division 1-42 in Docket No. 3162.

(2) Per Schedule WEE-9.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Bad Debt Expense to
Reflect Normalized Write-Offs
Rate Year Ending June 30, 2004

Fiscal Year	Accounts Written Off (1)	Bad Debt per Audit (1)
1998	80,196	80,196
1999	31,087	79,007
2000	26,858	(53,096)
2001	46,066	(6,353)
2002	221,760	206,109
Average 1998-2002	$ 81,193	$ 61,173
Average 2000-2002	$ 98,228	$ 48,887
Normalized Expense Based on Recent Experience (2)		$ 120,000
Amount per NBC Filing (3)		206,109
Adjustment to Rate Year Expense		$ (86,109)

Notes:

(1) Per the responses to DIV 1-24 in current proceeding and Division 1-43 in Docket No. 3162.

(2) Per follow-up response to DIV 1-24.

(3) Per Schedule WEE-4.

THE NARRAGANSETT BAY COMMISSION

Adjustment to Management/Audit Services Expense
Rate Year Ending June 30, 2004

Management/Audit Services Expense per Company Filing (1)	$ 1,740,171
Less: Adjustment to Normalize Job Assessment Study (2)	(13,333)
Less: Adjustment to U.S. Filter Fee for Updated CPI (3)	(17,665)
Less: Storm Water Rate Study (4)	(290,000)
Adjusted Other Repairs Expense	$ 1,419,173
Management/Audit Services Expense per Company Filing (1)	$ 1,740,171
Adjustment to Rate Year Expense	$ (320,998)

Notes:

(1) Per Schedule WEE-20.

(2) Reflects normalization of study costs of $20,000 over 3 years, consistent with the frequency of such studies and the amortization period for rate case expense.

(3) Refer to Page 2 of this schedule.

(4) Refllects elimination of amount per Schedule WEE-20.

THE NARRAGANSETT BAY COMMISSION

Calculation of U.S. Filter Fee to Reflect
Updated Projection of Consumer Price Index
Rate Year Ending June 30, 2004

April 1, 1999 Base Consumer Price Index (1)	166.2
Projected April 1, 2003 Consumer Price Index (2)	182.4
Multiplier Applicable to Base Annual Fee	1.09747
Base Annual Fee (1)	$ 1,276,172
Multiplier	1.09747
Gross U.S. Filter Fee	$ 1,400,560
Grit Deduction (1)	(56,404)
U.S. Filter FY 2004 Fee	$ 1,344,156
Rate Year U.S. Filter Fee per NBC Filing (3)	1,361,821
Adjustment to Rate Year Expense	$ (17,665)

Notes:
(1) Per response to Division I-28.

(2) Based on January 31, 2003 CPI-U of 181.7 adjusted to reflect 2 months growth at Blue Chip Economic Indicators February 2003 consensus forecast rate of 2.3% for 2003.

(3) Per Schedule WEE-20.

Docket No. 3483
Schedule TSC-10

THE NARRAGANSETT BAY COMMISSION

Adjustment to Debt Service and Coverage Allowance
to Reflect Two Year Average Debt Service for FY 2004 & 2005
Using Tax Exempt Commercial Paper and Mid-Year Convention
Rate Year Ending June 30, 2004

Debt Service		Annual Expense
Total Payments for 2004 (1)	$	19,443,490
Total Payments for 2005 (1)		24,376,286
Two Year Total	$	43,819,776
Two Year Average	$	21,909,888
Amount per NBC Filing (2)		25,524,784
Adjustment to Debt Service Expense	$	(3,614,896)

Coverage Allowance		
Coverage Allowance (1)	$	6,094,072
Amount per Company (2)		7,300,819
Adjustment to Coverage Allowance	$	(1,206,748)

Notes:
(1) Refer to Schedule TSC-11.

(2) Per Schedule WEE-4

Docket No. 3483
Schedule TSC-11

THE NARRAGANSETT BAY COMMISSION

Analysis of Annual Debt Service and Required Rate Increases
Associated with Tax-Exempt Commercial Paper Financing Alternative
For the Period FY 2004 through FY 2009

	FY 2004	FY 2005	Fy 2004-05 Average	FY 2006	FY 2007	FY 2008	FY 2009
Rate Year Operating Expenses per NBC	$ 26,616,525	$ 26,616,525	$ 26,616,525	$ 26,616,525	$ 26,616,525	$ 26,616,525	$ 26,616,525
Less: 2003 Carryforward	(2,025,910)	(2,025,910)	(2,025,910)	-	-	-	-
Less: Division Adjustments to Oper. Expenses	(1,197,896)	(1,197,896)	(1,197,896)	(1,197,896)	(1,197,896)	(1,197,896)	(1,197,896)
Revenue Requirement before Debt Service	$ 23,392,719	$ 23,392,719	$ 23,392,719	$ 25,418,629	$ 25,418,629	$ 25,418,629	$ 25,418,629
SRF Debt Service (1)	17,773,930	21,393,007	19,583,469	25,763,876	30,282,170	34,596,023	37,681,333
TECP Debt Service (1)	1,669,560	2,983,279	2,326,420	4,386,260	4,779,133	2,987,797	952,446
Total Debt Service	$ 19,443,490	$ 24,376,286	$ 21,909,888	$ 30,150,136	$ 35,061,303	$ 37,583,820	$ 38,633,779
Coverage Requirements (2)	$ 4,860,873	$ 6,094,072	$ 6,094,072	$ 7,537,534	$ 8,765,326	$ 9,395,955	$ 9,658,445
Total Expenses	$ 47,697,082	$ 53,863,077	$ 51,396,679	$ 63,106,299	$ 69,245,258	$ 72,398,404	$ 73,710,853
Operating Reserve	381,279	381,279	381,279	381,279	381,279	381,279	381,279
Total Revenue Requirement	$ 48,078,361	$ 54,244,356	$ 51,777,958	$ 63,487,579	$ 69,626,537	$ 72,779,684	$ 74,092,132
Prior Year Revenue	$ 44,451,213	$ 48,078,361	$ 44,451,213	$ 51,777,958	$ 63,487,579	$ 69,626,537	$ 72,779,684
Percentage Increase	8.16%	12.82%	16.48%	22.62%	9.67%	4.53%	1.80%

Notes:
(1) Per response to Division data request

(2) Equal to 25% of debt service except amount for FY 2004-05 Average equals 25% of higher amount in FY 2005.

Docket No. 3483
Schedule TSC-12

THE NARRAGANSETT BAY COMMISSION

Calculation of Uniform Percentage Increase in Rates
Required to Generate Additional Revenues
Rate Year Ending June 30, 2004

Overall Revenue Increase Required (1)	$ 7,326,745
Revenues from Services Subject to Increase (2)	
Flat Fees-Residential	7,699,246
Measured Fees-Residential	14,945,977
Flat Fees-Commercial and Industrial	4,972,261
Measured Fees-Commecial	11,807,677
Measured Fees-Industrial	2,246,872
Discharge Permit Fees	1,084,693
Connection Permit Fees	66,156
BOD/TSS Surcharge	146,898
Septage Fees	741,233
Total Revenues from Services Subject to Increase	43,711,013
Uniform Percentage Increase	16.76%

Notes:
(1) Per Schedule TSC-1.

(2) Per Schedule WEE-4

THE NARRAGANSETT BAY COMMISSION

Calculation of Proposed Rates and
Proof of Revenues at Proposed Rates
Rate Year Ending June 30, 2004

	Current Rate	Percent Increase	Proposed Rate	Billing Units (1)	Revenue at Proposed Rates
Flat Fees					
Residential	$ 68.24	16.76%	$ 80.00	112,831	$ 9,026,480
Commercial & Industrial					
Meter Size					
5/8"	152.27	16.76%	178.00	3,828	681,384
3/4"	228.41	16.76%	267.00	880	234,960
1"	380.68	16.76%	444.00	1,045	463,980
1.5"	761.34	16.76%	889.00	832	739,648
2"	1,218.15	16.76%	1,422.00	1,799	2,558,178
3"	2,284.03	16.76%	2,667.00	73	194,691
4"	3,806.71	16.76%	4,445.00	51	226,695
6"	7,613.42	16.76%	8,889.00	57	506,673
8"	12,181.48	16.76%	14,223.00	13	184,899
10"	17,510.88	16.76%	20,446.00	1	20,446
Total Commercial & Industrial Flat Fees					$ 5,811,554
Measured Fees					
Residential	1.40	16.76%	1.630	10,689,623	17,424,085
Commercial (3)	2.03	16.76%	2.365	5,825,507	13,777,324
Industrial	1.31	16.76%	1.525	1,719,119	2,621,656
Total Measured Fees					$ 33,823,066
Other Revenue					
Discharge Permit Fees	1,084,693	16.76%			1,266,488
Connection Permit Fees	66,156	16.76%			77,244
BOD/TSS Surcharge	146,898	16.76%			171,518
Septage Fees	741,233	16.76%			865,464
	2,038,980				$ 2,380,713
Total Service Revenue					$ 51,041,813
Target Revenue (2)					51,037,758
Variance					$ 4,055

Notes:

(1) Per Schedule WEE-34

(2) Per Schedule TSC-12. Target equals revenue at present rates plus required increase.

(3) Rates have been adjusted down by $0.005 to minimize variance.